

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 November 2002 (28.11.2002)

PCT

(10) International Publication Number
WO 02/095618 A3

(51) International Patent Classification⁷: **G06F 17/30**

[DK/DK]; Niels Brocks Gade 6, 5.tv., DK-1574 Copenhagen V (DK).

(21) International Application Number: PCT/DK02/00340

(22) International Filing Date: 21 May 2002 (21.05.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PA 2001 00816 21 May 2001 (21.05.2001) DK
09/861,615 22 May 2001 (22.05.2001) US

(71) Applicant (for all designated States except US): **MON-DOSOFT A/S** [DK/DK]; Vestergade 18E, DK-1456 Copenhagen K (DK).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **HYLDAHL, Anders**

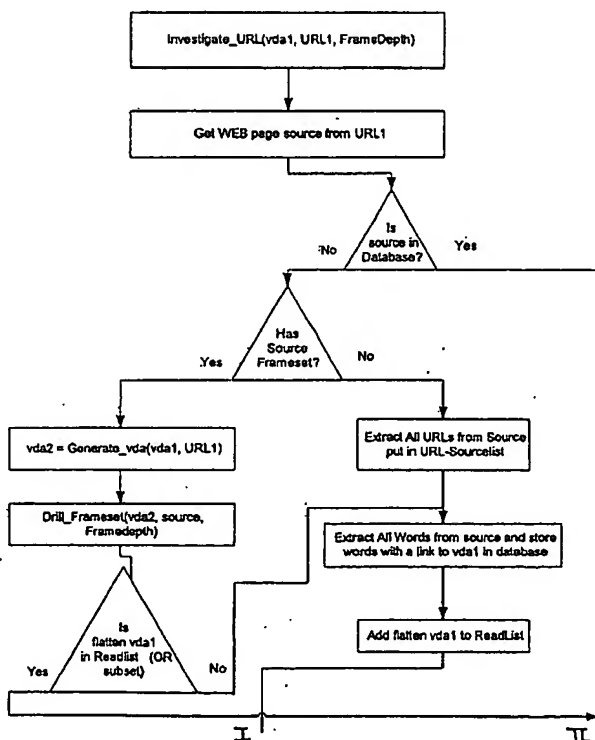
(74) Agent: **PLOUGMANN & VINGTOFT A/S**; Sundkrogs-gade 9, P.O. Box 831, DK-2100 Copenhagen Ø (DK).

(81) Designated States (*national*): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,

[Continued on next page]

(54) Title: A METHOD AND COMPUTER SYSTEM FOR CONSTRUCTING REFERENCES TO VIRTUAL DATA



(57) Abstract: The present invention relates to a method and a computer system enabling referencing to virtual data and in particular to a method and a computer system for constructing a reference to virtual data. In aspect of the present invention a virtual data argument for virtual data is provided. The virtual data argument comprises a data structure holding: at least one identifier each uniquely identifying one or more items of the virtual data, and at least one descriptor uniquely defining relationship between the item(s) identified by the identifier(s). The present invention is particular useful for indexing data, e.g. frame structures, which are not explicitly represented but constructed during execution of an application, e.g. a web-browser.

WO 02/095618 A3



GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

(88) Date of publication of the international search report:
6 February 2003

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/DK 02/00340

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G06F 17/30

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 0077686 A2 (SUN MICROSYSTEMS, INC), 21 December 2000 (21.12.00), the whole document --	1-34
X	EP 1054319 A2 (KOM INC), 22 November 2000 (22.11.00), column 3, line 30 - column 10, line 6, abstract --	1-14, 20-30, 33-34
A	EP 0542483 A1 (INTERNATIONAL BUSINESS MACHINES CORP), 19 May 1993 (19.05.93) --	1-34
A	WO 0041510 A2 (STORAGE TECHNOLOGY CORP), 20 July 2000 (20.07.00) --	1-34

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

16 Sept 2002

Date of mailing of the international search report

18. 10. 2002

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Henrik Andersson/LR
Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/DK 02/00340

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E,A	<p>US 6438559 B1 (WHITE, S.R.N. ET AL.), 20 August 2002 (20.08.02)</p> <p>-- -----</p>	1-34

06524

INTERNATIONAL SEARCH REPORT

Information on patent family members

02/09/02

International application No.

PCT/DK 02/00340

Patent document cited in search report			Publication date	Patent family member(s)		Publication date
WO	0077686	A2	21/12/00	AU	5478200 A	02/01/01
				US	6411956 B	25/06/02
EP	1054319	A2	22/11/00	CA	2308681 A	18/11/00
				US	6438642 B	20/08/02
				US	2002046320 A	18/04/02
EP	0542483	A1	19/05/93	CA	2055295 A	13/05/93
				JP	2625619 B	02/07/97
				JP	5225065 A	03/09/93
				US	5561778 A	01/10/96
				US	5579499 A	26/11/96
				US	5594881 A	14/01/97
				US	5652873 A	29/07/97
				US	5664160 A	02/09/97
				US	5687343 A	11/11/97
WO	0041510	A2	20/07/00	EP	1071989 A	31/01/01
				US	6330621 B	11/12/01
				US	2002032816 A	14/03/02
US	6438559	B1	20/08/02	NONE		